THERAPEUTICS

UNDER THE CHARGE OF

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The Rate of Absorption and Excretion of the Iodides of Strontium, Sodium and Potassium.—KRAHULIK and PILCHER (*Arch. Int. Med.*, 1918, xxi, 176) conclude from their experiments on human subjects that there is practically no difference in the rate of excretion of the iodides of strontium, sodium and potassium. After ingestion of the corresponding doses of iodide the rate of excretion rapidly increases, reaching its maximum at about the sixth hour, and then decreases rapidly, so that during the third day but 10 to 20 mg. are excreted. A somewhat greater quantity of strontium iodide than of sodium is excreted during the twenty-four-, forty-eight- and seventy-two-hour periods. The difference is slight and probably of no clinical significance. There seems to be no definite ratio between the excretion of iodide and the volume of the urine, in some instances a large volume of urine is associated with a greater excretion of iodide, in others the reverse is the case. About an hour after taking iodide two of the subjects complained of soreness of the pharynx, which persisted for several hours. There was no apparent difference from the different iodides in the time of onset, intensity and duration of the symptoms. A third subject noted an acne eruption of the same degree from the strontium and sodium salts. The authors conclude that the prevalent idea that strontium iodide is more slowly absorbed than the potassium and sodium salt is erroneous. In fact the rate of absorption of strontium iodide is at least as rapid as the rate of absorption of the other salts examined, and both the rate and total excretion seem to be slightly greater with strontium iodide, although the difference is so slight that it is of no clinical significance.

The Value of the Atropin Test in the Diagnosis of Typhoid Fever.—MASON (*Arch. Int. Med.*, 1918, xxi, 1) reports the results of 306 atropin tests performed on 63 patients suffering from typhoid or paratyphoid B infections and on 46 non-typhoid patients. The technic employed by Mason was substantially that introduced by Marris. The average mean pulse rate was obtained by counting the pulse for ten consecutive minutes while the patient rested quietly in bed. The atropin (gr. $\frac{1}{80}$ or gr. $\frac{1}{33}$) was injected subcutaneously, and after twenty minutes the pulse rate was again taken and counted every minute until the acceleration had reached and definitely passed its maximum. The difference between the maximum acceleration and the average mean pulse rate is taken as the "release." Marris found that in most normal persons the increase in pulse rate (the release) was from twenty to forty beats per minute, and that a release of ten beats or less per minute was suggestive of enteric infection. Mason carried out 256 tests on 58 cases of typhoid fever (diagnosis confirmed by blood culture or positive

Widal reaction in 56) and 5 cases of paratyphoid B infection. Eleven of these 63 cases failed to give a positive atropin reaction, that is, a release of ten or less. This high percentage may be accounted for by the fact that 6 of the 11 patients received only one test, and that 3 were extremely restless and toxic. On the average the test appeared on the eleventh day of the disease and disappeared on the thirty-first day. In 12 of 35 cases the atropin test appeared before the Widal, and in 4 it was positive before either the Widal or the blood culture. Of 46 non-typhoid patients 3 gave positive reactions. These patients suffered from acute bronchitis, tuberculous meningitis and diabetes mellitus respectively. The average release of all other non-typhoid cases was 23.9 (extremes 11 to 54). The maximum acceleration appeared 33.5 minutes after injection. From his results, Mason concludes that in the diagnosis of enteric infections the atropin test is of great value.

Common Colds as a Possible Source of Contagion for Lobar Pneumonia.—VALENTINE (*Jour. Exp. Med.*, 1918, xxvii, 27) recovered pneumococci from 43 out of 65 cases of common colds. The incidence of type or group was as follows: Group I, 2 cases; Group II, 2 cases; Group III, 4 cases; Group IV, 35 cases. The cases from which Group II was isolated and one of the Group III cases had been in contact with pneumonia, and it was not possible to decide whether they were merely contact carriers or whether the cold was an actual infection by pneumococci due to contact with the pneumonia cases. In two instances, with no known contact with cases of pneumonia, pneumococcus Type I was found to be the predominating organism, which strongly suggests that it was the etiological agent in these colds. If this is so, common colds of this type must be looked upon as a possible source of contagion in the development of lobar pneumonia due to Type I pneumococcus.

Further Observations on the Clinical Actions of Veratrum.—This report (*Jour. Pharmacol.*, 1918, xi, 89) is a continuation of the previous work of COLLINS and HANZLIK on the clinical action of veratrum album, and comprises 36 observations on 27 different patients suffering from nephritis, typhoid, tuberculosis, eclampsia, etc., and various circulatory disturbances and on two normal persons. The preparation employed was the 10 per cent. tincture of veratrum album administered with one or two tumblers of water to allay gastric irritation. During the observations all patients were lying quietly in bed. The pulse rate was taken every fifteen minutes and blood-pressure was estimated (auscultatory method) every fifteen to thirty minutes. The following is a summary of their findings: Single therapeutic doses of from 15 to 20 minims caused a slowing of the pulse and a fall in blood-pressure, and this occurred independently of such symptoms as nausea and vomiting. Large and repeated doses (25 to 75 minims) caused a fall in both systolic and diastolic blood-pressure and a diminution in the pulse rate roughly proportional to the dose. In the 11 cases of circulatory disorders the effect was most marked in hypertonus (6 cases); less marked, inconstant, or no effect at all in heart block (2 cases), paroxysmal tachycardia, myocarditis, with renal vascular disease, aortic insufficiency (1 case